



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,765	02/07/2002	Brian Huppi	APL1P213/P2662	2916

22434 7590 08/04/2003

BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

OSORIO, RICARDO

ART UNIT PAPER NUMBER

2673

DATE MAILED: 08/04/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

87

Office Action Summary

Application No.

10/072,765

Applicant(s)

HUPPI, BRIAN

Examiner

RICARDO L OSORIO

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/7/2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 & 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Application has been examined. The original claims 1-37 are pending. The examination results are as following.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "46" has been used to designate the rotary dial, the mouse, the mouse housing, the moveable base and the tactile features. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-17, 19-34 and 36-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al (WO 99/49443).

Regarding claim 1, Rosenberg teaches of a user operated input device (Fig. 1, reference character 12 and Fig. 2, reference character 32) comprising a housing (Fig. 1, outside cover of mouse) and a rotary dial positioned relative to an external surface of the housing (Fig. 1, reference character 16, Fig. 3A, reference character 54, page 16, lines 1-4 and page 20, line 37- page 21, line 2), the rotary dial providing a control function (page 16, line 6).

Art Unit: 2673

Regarding claim 2, Rosenberg teaches of the control function being associated with performing an action on the display screen (page 10, lines 26-28).

Regarding claim 3, Rosenberg teaches of the control function corresponding to a scrolling feature (page 10, line 28).

Regarding claim 4, Rosenberg teaches that the control function is used to control various applications associated with a computer system (page 2, lines 18 and 19).

Regarding claim 5, Rosenberg teaches that the rotary dial is arranged to rotate around an axis in order to implement the control function (page 10, lines 30-32).

Regarding claim 6, Rosenberg teaches that the rotary dial rotates within a plane that is substantially parallel to the external surface of the housing (page 16, lines 1-3).

Regarding claim 7, Rosenberg teaches that the rotary dial has an engageable face for allowing a user to facilitate rotation of the rotary dial, the engageable face completely exposed to the user (Fig. 3A, reference character 54. Note that top face is engageable and completely exposed).

Regarding claim 8, Rosenberg teaches that the engageable face is substantially parallel to the external surface of the housing (Figs. 3A, reference character 54. See top face).

Regarding claim 9, Rosenberg teaches that the user operated input device is configured for moving a cursor or pointer on a display screen (page 24, lines 17-18).

Regarding claim 10, Rosenberg teaches that a substantial portion of the rotary dial is accessible to the user (Fig 3A, reference character 54).

Art Unit: 2673

Regarding claim 11, Rosenberg teaches that the rotary dial is tangentially accessible to a user from the entire circumference of the rotary dial (Figs. 3A, reference character 54. The user can access the rotary dial from all sides of its circumference).

Regarding claim 12, Rosenberg teaches of a mouse for moving a cursor or pointer on a display screen (page 24, lines 17-18) comprising: a mouse housing (Fig. 1, outside cover of mouse); and a disk coupled to the mouse housing (Fig. 1, reference character 16, Fig. 3A, reference character 54, page 16, lines 1-4 and page 20, line 37-page 21, line 2), and rotatable about an axis (page 16, line 2), the disk being configured to facilitate a control function on the display screen (Fig. 3A, reference character 54, and page 16, lines 1-6), the disk having a touchable surface for rotating the disk about the axis (Fig. 3A, reference character 54. See top surface), the touchable surface being completely accessible to a finger of the user such that the disk can be continuously rotated by a simple swirling motion of the finger (Fig. 3A, reference character 54 and page 16, lines 1-3. Note that top face can be continuously rotated by swirling motion of finger).

Regarding claim 13, Rosenberg teaches that the control function is associated with performing an action on the display screen (page 10, lines 26-28).

Regarding claim 14, Rosenberg teaches that the control function corresponds to a scrolling feature (page 10, line 28).

Regarding claim 15, Rosenberg teaches that the scrolling feature allows a user to move displayed data across a viewing area on the display screen so that a new set of displayed data is brought into view in the viewing area (page 2, lines 16-17 and page 27, lines 1-2).

Art Unit: 2673

Regarding claim 16, Rosenberg teaches that the rotation of the rotary dial causes the displayed data to move across the viewing area of the display screen (page 2, lines 16-17 and page 27, lines 1-2).

Regarding claim 17, Rosenberg teaches that the displayed data is moved vertically or horizontally on the display screen (page 2, lines 16-17, page 10, lines 30-34 and page 27, lines 1-2).

Regarding claim 19, Rosenberg teaches that the mouse housing provides a pressing, or clicking action for performing an action on the display screen (page 10, lines 17-18).

Regarding claim 20, Rosenberg teaches of a computer mouse (Fig. 1, reference character 12 and Fig. 2, reference character 32) comprising: a body moveable by a user (page 24, lines 17-18); a disk (Fig. 1, reference character 16) rotatably coupled to the body about an axis (page 1, lines 30-31), and having a surface for facilitating movements thereof (Fig. 1, reference character 16 and Fig. 3A, reference character 54, both have a surface accessible by the user for movement), the surface being positioned substantially orthogonal (normal) to the axis (page 10, lines 30-34 and page 16, lines 1-5); and an encoder for measuring the rotation of the disk (page 21, lines 4-5).

Regarding claim 21, Rosenberg teaches that a substantial portion of the surface is exposed outside of the body (see Fig. 3B, reference character 68. Note that the wheel has a substantial portion its surface outside the body).

Regarding claim 22, Rosenberg teaches that the surface is completely accessible to a finger of the user (see Fig. 3A, reference character 54. Note that the top face is completely accessible to a user's finger).

Regarding claim 23, Rosenberg teaches that the disk is configured to facilitate a control function on the display screen (Fig. 3A, reference character 54, and page 16, lines 1-6).

Regarding claim 24, Rosenberg teaches that the control function corresponds to a scrolling feature (page 10, line 28).

Regarding claim 25, Rosenberg teaches that the disk is positioned relative to the top of the body (Fig. 1, reference character 16 and page 10, lines 19-20).

Regarding claim 26, Rosenberg teaches that the disk is positioned relative to the side of the body (page 10, lines 20-21. Note that in a mouse such as the one in Fig. 1, the thumb rests or is normally placed relative to the side of the mouse body).

Regarding claim 27, Rosenberg teaches that the disk is substantially flush with a top surface of the body (see Fig. 1, reference character 16. Note that the disk is substantially flush with the surface of the mouse body).

Regarding claim 28, Rosenberg teaches that the plane of rotation of the disk is parallel to a top of surface of the body (page 16, lines 1-3).

Regarding claim 29, Rosenberg teaches of the disk including tactile elements for increasing the feel of the disk (page 10, lines 23-24).

Regarding claim 30, Rosenberg teaches that the tactile elements are bumps extending from the surface or voids representing removed sections of the surface (page 10, lines 23-24).

Regarding claim 31, Rosenberg teaches that the encoder is a mechanical encoder or optical encoder (page 21, lines 3-13).

Regarding claim 32, Rosenberg teaches that the body provides a pressing, or clicking action for performing an action on a display screen (page 10, lines 17-18).

Regarding claim 33, Rosenberg teaches that the clicking is actuated in a direction normal to the body (See Fig. 1, reference character 15. The click buttons are parallel to the top surface of the mouse body, and the clicking action is normal, or perpendicular, to the mouse body).

Regarding claim 34, Rosenberg teaches of a base coupled to the body, the base being configured to make moving contact with a surface when the body is moved by the user (See Fig. 1, bottom of mouse, and page 10, lines 2-5).

Regarding claim 36, Rosenberg teaches of a positional movement detecting mechanism for moving an input pointer on a display screen (col. 10, lines 3-7 and col. 24, lines 17-18).

Regarding claim 37, Rosenberg teaches of a button, or click button, for allowing the user to make a selection on the display (Fig. 1, reference character 15, and page 10, lines 17-18).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg (see above) in view of McLoone et al (US 2002/0158844).

Regarding claim 18, Rosenberg teaches that the wheel, or disk, can be used for scrolling a document in a window (page 10, lines 27-28).

However, Rosenberg fails to teach that side to side manipulation of the disk corresponds to horizontal scrolling, and that forwards and backwards manipulation of the disk corresponds to vertical scrolling.

McLoone teaches of a mouse having a scroll wheel, or disk (Fig. 1, reference character 30) wherein side to side manipulation of the disk corresponds to horizontal scrolling (page 4, paragraph 37, lines 1-21), and wherein forwards and backwards manipulation of the disk corresponds to vertical scrolling (page 3, paragraph 36, lines 1-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the side to side, as well as the forwards and backwards manipulation of the disk for the purpose of scrolling both vertically and horizontally, as taught by McLoone, in the device of Rosenberg because it makes it easy for a user to scroll an image both horizontally and vertically relative to the display screen without needing to reposition the peripheral device or repositioning the hand on the device (See McLoone, page 2, paragraph 9, lines 8-12 and paragraph 11, lines 1-8).

6. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg (see above) in view of Lin (US 2002/0154090).

Regarding claim 35, Rosenberg fails to teach that the axis is obliquely positioned relative to the base.

Lin teaches of a mouse (page 1, paragraph 15, line 5) having a rolling wheel, or disk (Figs. 5-7, reference character 11), with an axis of rotation obliquely positioned relative to the base (page 1,

Art Unit: 2673

paragraph 17, lines 1-11, and paragraph 18, lines 1-7. Note that when the user adjusts the scrolling device (see Figs. 6-7, reference character 1) to a specific angle, the axis of rotation of the rolling wheel is then obliquely positioned relative to the base of the mouse).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the axis of rotation of the rolling wheel obliquely positioned with respect to the base, as taught by Lin, in the device of Rosenberg because the user can rotate the scrolling device to a specific angle for more comfortable operation thus reducing the strain of finger and wrist during operation (see Lin, page 1, paragraph 4, lines 1-3, paragraph 5, lines 2-4 and paragraph 18, line 8-9).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

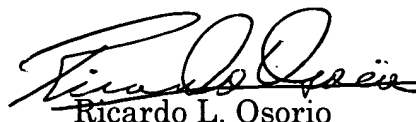
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Ricardo L. Osorio
Examiner
Art Unit: 2673

RLO
July 23, 2003